

TESTIMONY OF

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on

GASOLINE: SUPPLY, PRICE and SPECIFICATIONS

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Introduction

My name is Bill Shea. I am President and CEO of Buckeye Partners, LP, one of the largest independent refined petroleum products pipeline systems in the United States in terms of volumes delivered, with approximately 5,350 miles of pipeline. Buckeye also owns and operates 44 refined petroleum products terminals with an aggregate storage capacity of approximately 17.2 million barrels in Illinois, Indiana, Massachusetts, Michigan, Missouri, New York, Ohio and Pennsylvania, and operates and maintains approximately 2,000 miles of pipeline under agreements with major oil and chemical companies.

I am appearing today on behalf of the Association of Oil Pipe Lines and the oil pipeline members of API. AOPL is a 501 (c) (6) non-profit trade association of interstate oil pipelines, which includes pipeline transporters of crude oil, refined petroleum products, liquefied gases and anhydrous ammonia. Our Association's 49 members transport about 85 percent of the crude oil and refined petroleum products delivered by pipelines. AOPL members include pipelines that transport crude oil from production and import points to refineries and pipelines that transport the refined products produced in those refineries to end users and distributors (retailers, wholesalers, airports, railroads, etc.). AOPL's membership is comprised of domestic U.S. oil pipeline companies and Canadian oil pipeline companies. API represents over 400 companies involved in all aspects of the oil and natural gas industry, including exploration, production, transportation, refining and marketing. Together, these two organizations represent the vast majority of the U.S. pipeline transporters of petroleum products.

My testimony will cover the role played by oil pipelines in petroleum supply, describe government oversight of that role and sketch the challenges faced by the industry in providing for our nation's petroleum transportation needs, with emphasis on the coming months.

The Role of Oil Pipelines in the U.S.

Oil pipelines provide about 2/3 of the petroleum transportation in the U.S., measured in barrel miles. Unlike natural gas, which can only be transported by pipeline, alternatives to petroleum pipeline transportation exist and include tankers, barges, rail and trucks. However, each of these alternatives has significant limitations, and, as a result, pipelines are the primary method of bulk transportation of petroleum over medium to long distances. It is difficult to imagine how our transportation network, which is 95% powered by petroleum, could operate without oil pipelines.

Pipeline transportation has dual advantages of efficiency and safety. About 17% of the annual ton-miles of our nation's freight are carried by petroleum pipelines, at a cost of about 2% of the total U.S. freight bill. Pipelines share with tanker vessels the safest record in petroleum transportation, safer than barge, rail or truck. Deaths and injuries from petroleum pipeline transportation are rare. The environmental impact of pipeline transportation is less than any of its alternatives. Oil pipelines deliver petroleum safely to nearly every region of the U.S. for a few pennies per gallon. A typical rate to transport petroleum product from the Gulf Coast to the Southeast is about 2 cents per gallon, to the Northeast is about 3 cents per gallon and to Chicago is about 2.5 cents per gallon.

Economic Regulation of Oil Pipelines

The federal government regulates the economics of interstate oil pipelines – in fact oil pipelines are the only part of the petroleum supply system that is under federal economic regulation.

The Federal Energy Regulatory Commission administers the provisions of the Interstate Commerce Act to ensure that interstate oil pipelines:

- Function as common carrier providers of transportation to any qualified shipper;
- Charge no more than publicly available rates filed in advance with the FERC, which are typically limited to a few cents per gallon;
- Assign space on the pipeline based on monthly nominations from all interested shippers and prorate access to that space among all applicants in a posted, non-discriminatory way when the line is full;
- Exercise no undue discrimination among shippers;
- Maintain confidentiality of shipper records and not share information of any shipper with any other shipper; and
- File annual reports on pipeline company income and cost data with the FERC that are available to the public.

Oil pipelines provide transportation services and charge fees that do not fluctuate with the price of the products that are transported. Because oil pipelines do not own the products that they transport, they do not benefit from any product price increases. In fact, refined products pipelines are generally adversely impacted by high commodity prices, as higher

prices increase power costs and lower consumption levels. Even when an oil pipeline is an affiliate of a major integrated oil company, the Interstate Commerce Act and FERC oversight establish a wall between the pipeline portion of the firm and the owners' other operations.

Oil Pipeline Rates

Typical oil pipeline rates range from 1 to 5 cents per gallon and are independent of the value of the oil being transported. Thus the revenue received by the oil pipeline is the same few cents per gallon, regardless of the sale price of that gallon, whether that sale price is \$1.00, \$2.00, \$3.00 or more.

Oil pipeline rates are posted in FERC-filed tariffs that normally take effect after 30 days and are subject to protest during that period. Oil pipeline rate changes are justified using one of four rate mechanisms: indexation, a settlement rate agreed to by all affected shippers, market-basis or cost-of-service. In calendar years 2003 and 2004, there were 1096 oil pipeline tariff rate filings. Of those, 937 (88%) were index-based, and 159 were justified on another basis. Of the 159 others, roughly 49% were market-based, 30% were settlement rates, 14% resulted from previous settlements and 7% were cost of service based.

Most oil pipeline tariffs cover a specific group of products. For instance, a "Products Tariff" would apply the same tariff rate to gasoline, diesel, jet fuel and kerosene product shipments between the same points. For instance, Colonial's tariff defines "Petroleum Products" to mean "gasolines and petroleum oil distillates", which would include jet fuel, diesel fuel and heating oil. There are also crude oil tariffs, propane tariffs, etc.

Pipeline tariffs do not change frequently and, unlike commodity prices, are not adjusted as a result of short-term market circumstances. Because nearly 90% of tariffs are indexed, most adjustments are done on an annual basis and occur on July 1 of each year when the new FERC index takes effect. Even market based rate changes occur infrequently, with some changes actually reducing rate to meet competitive market conditions.

Pipelines also file rules and regulations tariffs that set forth the pipeline's conditions of service. These filings explain such things as the pipeline's tendering process, minimum batch size, allocation policy and product specifications. Such rules and regulations must be administered in a non-discriminatory manner. A system of checks and balances on oil pipeline behavior operates through the ability of any shipper to protest any alleged deviation from FERC requirements.

Oil pipelines are providers of transportation services for generally fixed fees for our customers, who determine what to ship, where to ship or when to ship. The decision on how much to ship of each commodity and to which destination is made by our shipper customers. Pipelines then ship multiple products on a regular cycle of products. Normal practice is to provide transportation for all products to all destinations on a regular cycle.

Oil Pipeline Revenues

The oil pipeline business is volume driven, and the incentive for pipelines from both a revenue and customer relations standpoint is to transport as much product as possible. Any inference that oil pipeline operators are purposely contributing to product shortages by reducing or shutting down capacity to cause higher product prices is simply false. In fact, the oil pipeline industry's drive to transport more volumes contributes to market liquidity, which on the margin should contribute to more competition and lower prices. The extraordinary efforts of our member companies to return their systems to service as fast as possible in 2005 in the aftermath of hurricanes Katrina and Rita provide ample evidence of the pipeline industry's motivation and commitment to business continuity and recognition of the critically important role played by pipelines in enabling adequate supplies of petroleum products to reach destination markets.

The oil pipeline industry is not a large generator of revenue by comparison with other sectors of U.S. industry, including other sectors of the energy industry. For 2004 (the most recent data available) the entire FERC-regulated oil pipeline industry received gross revenue of \$8.0 billion to deliver 13.4 billion barrels of crude oil and refined petroleum products for its various customers. A single company's revenue in many other sectors of the economy would far exceed the oil pipeline industry's revenue as a whole.

Oil pipeline industry structure

Pipeline ownership is diverse, with several forms of ownership as detailed below:

- Major integrated oil companies (for example: ExxonMobil Pipeline Company, Marathon Pipe Line LLC, Chevron Pipeline Company, Shell Pipeline Company);
- Joint venture pipelines owned by shippers and other pipeline companies (for example: Colonial, Explorer, Trans-Alaska Pipeline, Capline); and
- Independents engaged primarily in oil pipeline transportation (Buckeye, TEPPCO, KinderMorgan, Enbridge, Plains All American).

A substantial percentage of the pipelines are independently owned and operated, with the current trend towards increased independent ownership of oil pipeline assets. Major integrated oil company ownership of oil pipelines has been steadily decreasing in recent years, with major oil companies now representing a minority of oil pipeline asset ownership.

Current pipeline-related issues in petroleum supply

Over the coming months, a combination of trends will affect the functioning of oil pipelines in fulfilling their role in petroleum supply.

- First, a long-term growth continues in the diversity of fuel types shippers seek to transport by pipeline – growth in so-called boutique fuels.
- Second, the nation is entering a period of phase out in use of the oxygenate methyl tertiary butyl ether and rapid growth in the use of ethanol as a gasoline fuel additive.
- Third, this summer, an historic transition to ultra low sulfur diesel fuels begins
- And finally, we should not forget that experts predict a continuation of a trend in stronger and more frequent hurricanes, which can knock out the electric power on which key oil pipelines and oil refineries depend for operation.

These elements in combination present a challenge to the petroleum supply system that the Committee should monitor closely. I'd like to briefly discuss each in turn.

Boutique fuels

The proliferation of types and grades of refined petroleum products shippers ask pipelines to carry continues. This growth in so-called “boutique” fuels puts increasing pressure on pipeline operations and by itself has absorbed storage and transmission capacity. Pipeline companies ship petroleum products in batches, with each batch distinct. Before 1970, when most of the US pipeline system was designed, a pipeline operator typically moved of the order of 10 distinct products. The Clean Air Act of 1990, as implemented by EPA and various states, ultimately led to the numerous kinds of gasoline in demand today. Gasoline is only part of the story. Fuels oils must also be segregated based on sulfur content (an EPA requirement) and dyed for specific markets (tax collection and EPA requirements). Jet fuel also requires segregated batches to meet different military and domestic aviation specifications. Typical large refined products pipelines today have of the order of 50 products regularly moving on each system over a shipping cycle. However, those same pipelines also have as many as a total of 100 – 120 product grades for which they may occasionally provide transportation services. Overall, the federal government requirements drive the majority of segregated batches, followed by customer specifications, and individual state or city requirements.

Capacity in long-haul pipelines, as well as many regional pipelines, declines as the number of products handled increases. The unique products need more system space in both the pipeline and in tanks, so a combination of increased total volume moved and the operational effects of boutique fuels proliferation have used up what was excess capacity for product in the early 1990s. For example, some tanks must be completely emptied of one seasonal product before the next seasonal product can be stored, or specialized products may only use a portion of a tank, taking that tank out of service while that segregated product is moving through or temporarily stored. These factors reduce overall capacity.

Capacity is also reduced from the mixing that occurs at the interface of adjacent product grade batches during any transportation. This volume can sometimes be mixed into one or both of the adjacent batches and still meet the product specifications. At other times this trans-mix must be removed from the pipeline system prior to delivery to the

customer. Thus, less than 100% of some products reach their destination. If the product is unique and is transported in a large pipeline, this downgrade can be significant.

Ethanol and MTBE

Federal policies and state and local bans on the use in gasoline of the oxygenate methyl tertiary butyl ether have led shippers to phase out MTBE as a fuel additive. As a result, a transition is underway to the use of ethanol as a gasoline additive to meet local air quality specifications. This transition produces complications for gasoline supply by pipeline. The U.S. industry has blended ethanol in gasoline for decades. However, a significant challenge to use of ethanol is that it is not easily transportable through existing pipeline systems. As a result, ethanol is commonly transported by means other than pipeline (truck, barge or rail) to terminals at the end of a pipeline and mixed with gasoline before final delivery for consumption. These non-pipeline transportation modes are being called upon to supply significantly larger amounts of ethanol than previously required. Ethanol is not easily transported via pipelines for several reasons. First, ethanol has a tremendous affinity to absorb water. Water accumulation in pipelines is a normal occurrence. In most cases water enters the system through terminal and refinery tank roofs or can be dissolved in fuels during refinery processes. Transportation by pipeline may result in sufficient water absorption to render ethanol unusable as a transportation fuel. If a gasoline-ethanol mixture is shipped in a pipeline, the water may strip some of the ethanol out, resulting in sub-octane fuel. Once an ethanol blend phase-separates it is extremely difficult and usually impossible to re-blend. In many cases the ethanol-water bottoms must be disposed of in accordance with hazardous waste regulations.

Second, ethanol can dissolve and carry impurities that are present inside multi-product pipeline systems, making it harmful to motor vehicle engines when blended in gasoline.

Finally, ethanol is corrosive and may adversely affect pipeline parts. There is some evidence that ethanol in high concentrations can lead to internal stress corrosion cracking of the pipeline walls, which is hard to detect and manage. This may be accelerated at weld joints or “hard spots” where the steel metallurgy has been altered.

Solutions that will address problems with pipelines carrying ethanol are under active study by the industry and others, but at the present time, modes of transportation other than pipelines will carry the still relatively small but growing volumes of ethanol in the US fuel mix.

Ultra low sulfur diesel

Another transition that will take place this summer will bring significant volumes of 15 parts per million (ppm) sulfur -- ultra low sulfur -- diesel fuel (ULSD) into the US fuel distribution infrastructure under rules adopted by the Environmental Protection Agency. Products pipeline operators will continue to carry ULSD in pipeline systems in batch mode with higher sulfur fuels, including heating oil and exempted high sulfur diesel up to 5000 ppm sulfur and jet fuel up to 3000 ppm sulfur. The potential for contamination of

ULSD during pipeline transportation requires attention and has been the subject of much study and investment in the oil pipeline industry. Inability to deliver on-specification ULSD product could lead to significant supply issues in some markets when EPA requirements go into effect. Diesel fuel is the nation's primary commercial fuel for getting goods to market -- trucks, trains and coastal marine vessels all rely on diesel fuel to operate. The ability of specific pipelines to deliver ULSD is impacted by the sulfur level of tendered product, system configuration, and the difficulty, given the lack of operating experience, of preventing ULSD contamination. The experience we have shows that sulfur contamination of ULSD increases at successively distant points in the pipeline system, and especially after transfers through tankage and to other pipelines.

The oil pipeline industry is aligned with the rest of the petroleum industry in supporting the 15 ppm maximum sulfur standard for motor fuels that the President has recommended and the EPA has promulgated. We have no doubt that this standard is achievable. Petroleum products pipeline operators will ultimately be able to handle and deliver on-specification ULSD in routine operations.

However, currently operators lack sufficient experience moving ULSD to guarantee that ULSD can be delivered to all markets on specification in the time frames contemplated by the EPA. Limited experience by pipeline operators to date with ULSD shows that it will require significant effort and investment to prevent sulfur contamination of ULSD in pipeline systems that of necessity must transport other high sulfur products as well. Moreover, this experience is currently not extensive enough to allow the causes of such contamination to be sufficiently characterized to be able to effectively eliminate it in the short term.

The oil pipeline industry is confident that the problems we currently see with sulfur contamination can be solved, given real experience transporting ULSD in our systems and adequate time to implement the indicated changes to our systems. However, without the benefit of the knowledge that comes from actual experience with ULSD, we can not know what actions are needed to solve these problems.

Accordingly, AOPL asked EPA to allow flexibility in the supply and distribution system early in the program. Early flexibility will enable product to be supplied while the system resolves technical and operational difficulties that are likely to arise. For instance, at a minimum, storage tanks and other system assets must be flushed. Beyond that, the new fuel regulations will require new operating protocols throughout the system that cannot be perfected in advance of real world experience with 15 ppm diesel. Flexibility is reasonable when the nation is implementing an unprecedented and substantial change in its fuels regulations. It is essential when the nation's fuel supply is at issue.

In response, EPA agreed, to establish a transition period and during the transition period, to raise to 22 ppm the specification for compliant ULSD at retail. EPA also extended for 6 weeks, until October 15, 2006, the time by which fuel sold at retail must meet the 15 ppm requirement to within the agreed testing tolerance. AOPL welcomes EPA's decision

to implement a six-week extension to the time period for the distribution system to transition to 15 ppm fuel.

Affected oil pipeline operators are now making the investments and preparing for the transition period that will begin in June. We are preparing to react quickly to experience during the transition period with transportation of actual volumes of ULSD.

More Hurricanes like Katrina and Rita

Finally, experts tell us that we are in a period of significant risk of major hurricanes affecting the US Gulf Coast where refining centers and pipelines are vulnerable to storm damage and loss of electric power. In 2005 we all had plenty of experience with the disruptions such hurricanes can cause. In the aftermath of the disruptions caused by hurricanes Katrina and Rita, the following conclusions about petroleum supply that are relevant are fairly clear:

- Restoration of grid electric power is critical to the resumption of pipeline service and should receive the highest priority during these events. The federal government should be doing everything in its power to assist the electric utility industry generally and utilities individually to enhance the ability of utilities to overcome threats and recover rapidly where power is lost despite all best efforts.
- EPA needs to act quickly and decisively to waive area specific fuel requirements under the Clean Air Act in the widest possible area during emergencies. This allows the petroleum distribution system to make the most effective use of existing supplies. Following EPA's decisions in 2005, several refined petroleum product pipelines serving the Midwest immediately began receiving nominations of alternative gasolines to move north and east. This was an important action that was taken in a timely manner.
- Hoarding and panic buying exacerbate petroleum fuel shortages. Officials need to be active early and continuously to discourage, to the extent possible, these reactions. In addition, dissemination of false information by the media can make hoarding and panic buying worse and generally has a negative impact on markets.

Oil Pipeline Capacity

While the cost of transporting oil by pipeline has a minimal impact on consumer prices, access to adequate pipeline capacity can make a substantial difference in consumer prices. As the aftermath of hurricanes Katrina and Rita demonstrated, when adequate pipeline capacity is not available, shortages, price increases and price volatility for petroleum consumers is the result. Even before hurricanes Katrina and Rita, we saw what happens when pipelines are not available, for example, in Arizona in 2003 and in the Midwest in 2002 when key pipelines were out of service.

The U.S. oil pipeline infrastructure is a large system created over many years. Volumes moving on those pipelines grow only in response to increases in oil demand, that is, a few percent a year. Volumes seeking a pipeline can sometimes also increase or decrease due to changes in supply patterns, such as refinery closures, new crude supplies and other significant changes. Additions to capacity often present large hurdles to individual companies in terms of capital requirements and perhaps more importantly, acquisition of right of way and required permitting. The current system, constructed principally in the 1950s and 1960s with excess capacity for that time, is quite close to full capacity at today's levels of domestic petroleum consumption, and pipelines have had to adjust to a just-in-time inventory mentality, boutique fuels and to seasonal fuel switches that put additional strain on the system.

Recently, demand for petroleum products has been increasing, and that trend is expected to continue. In recent years, capacity for some pipelines has become constrained, particularly during the summer driving and winter heating seasons. These constraints, which affect both gasoline and distillates, will become more protracted as consumer demand continues to grow. Although alternative transportation such as long-distance trucking is an option for shippers in certain markets, those alternatives are typically less attractive than reliable, efficient, cost-effective pipeline service. Apart from the benefits to shippers and refiners, expansion of pipelines would provide increased stability and reliability to the nation's overall energy supply. As demonstrated by the effects of Hurricanes Katrina and Rita, it has become increasingly clear that the nation's energy supplies are subject to disruptions that can pose serious upsets to the national economy and security. The availability of additional pipeline capacity would provide healthy redundancy to the system and thus an additional measure of protection from disruptions that could otherwise lead to product price spikes and spot outages similar to those witnessed during and after the hurricanes. Pipeline expansion will involve right-of-way acquisition, permitting and capital investment issues, all of which could be affected by federal actions.

Oil pipelines are another component of the U.S. energy infrastructure that will require expansion in coming years to meet the needs of consumers. A supportive public policy will be required to ensure that oil pipeline expansions are made when needed. Elements of such a policy should include coordinated federal, state and local permitting to allow operators to comply with environmental requirements in a timely way. The Federal Energy Regulatory Commission should continue the recent trend to market-based and adequately-indexed oil pipeline rate treatment. Finally, FERC needs to act promptly on oil pipeline rate requests made to support specific expansion projects.

Summary

To summarize, the amount charged to transport oil by pipeline is limited by either regulation or market forces and is quite small in relation to the value of oil itself. The cost of transporting oil and petroleum products by pipeline has a minimal, if any, impact on consumer prices of petroleum products. In coming months, a number of factors affecting oil pipeline operations and related to fuel specifications deserve the attention of

public policymakers. These include the continuing growth in boutique fuels and the transition to ethanol and ultra low sulfur diesel, as well as the need to prepare for more hurricanes in the US Gulf Coast. The oil pipeline industry is focused on these issues and is preparing to address them appropriately.

We appreciate the opportunity to share our plans and views on these important issues with you. I will be glad to try to answer any of your questions, and AOPL and API would be pleased to work with the Committee on any follow up from this hearing.